Practice: 332 - Contour Buffer Strips
Scenario: #1 - 332-Native, Inc Forgone

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Native grasses, legumes and forbs will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: number of acres

Scenario Unit: Acre
Scenario Typical Size: 1

Scenario Cost: \$560.66 Scenario Cost/Unit: \$560.66

Cost Details (by category): **Price Component Name Component Description** Unit **Quantity Cost** (\$/unit) Equipment/Installation Chemical, ground application 948 Chemical application performed by ground equipment. Acre \$5.75 1 \$5.75 Includes equipment, power unit and labor costs. \$20.01 960 No Till drill or grass drill for seeding. Includes equipment, \$20.01 1 Seeding Operation, No Acre Till/Grass Drill power unit and labor costs. Foregone Income FI, Corn Dryland 1959 Dryland Corn is Primary Crop Acre \$313.51 1 \$313.51 Materials Three plus Species Mix, Warm 2327 Native, warm season perennial grass. Includes material Acre \$205.56 1 \$205.56 Season, Native Perennial and shipping only. \$15.83 \$15.83 Herbicide, Glyphosate Acre 1 334 A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.

Scenario: #2 - 332-Introduced, Inc Forgone

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of mainly introduced species. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Introduced grasses and legumes will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Introduced species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre
Scenario Typical Size: 1

Scenario Cost: \$432.04 Scenario Cost/Unit: \$432.04

Cost Details (by category): Price **Component Name Component Description** Unit **Quantity Cost** (\$/unit) **Equipment/Installation** Seeding Operation, No 960 No Till drill or grass drill for seeding. Includes equipment, \$20.01 1 \$20.01 Acre Till/Grass Drill power unit and labor costs. \$5.75 \$5.75 1 Chemical, ground application 948 Chemical application performed by ground equipment. Acre Includes equipment, power unit and labor costs. Foregone Income FI, Corn Dryland 1959 Dryland Corn is Primary Crop \$313.51 1 \$313.51 Acre Materials One Species, Cool Season, 2313 Introduced, cool season perennial grass. Includes material Acre \$30.44 1 \$30.44 Introduced Perennial Grass and shipping only. \$0.93 Sulfate of Potash 263 Approved for Organic Systems - Muriate of Potash 20 \$18.60 Pound Phosphorus, P2O5 73 Price per pound of P2O5 supplied by Superphosphate. Pound \$0.39 20 \$7.80 Price is not per pound of total product applied, no conversion is needed. 71 Price per pound of N supplied by Urea. Price is not per 30 \$20.10 Nitrogen (N), Urea Pound \$0.67 pound of total product applied, no conversion is needed. \$15.83 334 A broad-spectrum, non-selective systemic herbicide. Refer Acre \$15.83 1 Herbicide, Glyphosate to WIN-PST for product names and active ingredients. Includes materials and shipping only.

Scenario: #3 - 332-Wildlife/Pollinator, Inc Forgone

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of mainly pollinator friendly species. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Plant species will be established in strips in the field to meet the water erosion resource needs AND provide the targeted wildlife/pollinators the necessary food and/or cover AND any other producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species selected shall meet the wildlife/pollinator habitat requirements of the state and be adapted to site; not function as a host for diseases of a field crop and; have physical characteristics necessary to control sheet and rill erosion to tolerable levels on the cropped area of the field.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$401.28 Scenario Cost/Unit: \$401.28

Cost Details (by category)):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Chemical, ground application		Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.75	1	\$5.75
Seeding Operation, No Till/Grass Drill		No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.01	1	\$20.01
Foregone Income						
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$313.51	1	\$313.51
Materials						
Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)		Cool season grass and legume mix. Includes material and shipping only.	Acre	\$46.18	1	\$46.18
Herbicide, Glyphosate		A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.83	1	\$15.83

Scenario: #4 - 332-Organic Seed, Inc Forgone

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of certified organic seed. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Certified organic grass and legume seed will be planted in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of Acres

Scenario Unit: Acre
Scenario Typical Size: 1

Scenario Cost: \$545.64 Scenario Cost/Unit: \$545.64

Cost Details (by category	r):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$15.56	1	\$15.56
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.01	1	\$20.01
Site Preparation, Mechanical	944	Aerator, rolling drum chopper, etc. Includes equipment, power unit and labor costs.	Acre	\$65.86	1	\$65.86
Foregone Income			•	•	·	•
FI, Organic, Corn Dryland	2232	Organic Dryland Corn is Primary Crop	Acre	\$360.54	1	\$360.54
Materials						
Nitrogen, Organic	266	ORGANIC Nitrogen	Pound	\$0.27	30	\$8.10
Phosphorus, Organic	267	ORGANIC Phosphorus	Pound	\$0.27	20	\$5.40
Potassium, Organic	268	ORGANIC Potassium	Pound	\$0.27	20	\$5.40
Certified Organic, Three Species Mix, Cool Season, Perennial Grasses and Legumes	2340	Certified organic cool season perennial grass and legume mix. Includes material and shipping only.	Acre	\$64.77	1	\$64.77

Scenario: #5 - 332-Native, Inc Forgone-High Value Cropland

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Native grasses, legumes and forbs will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$1,208.65 Scenario Cost/Unit: \$1,208.65

Cost Details (by category	r):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Chemical, ground application		Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.75	1	\$5.75
Seeding Operation, No Till/Grass Drill		No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.01	1	\$20.01
Foregone Income						
FI, Vegetables	2033	Vegetables is Primary Crop	Acre	\$961.50	1	\$961.50
Materials						
Herbicide, Glyphosate		A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.83	1	\$15.83
Three plus Species Mix, Warm Season, Native Perennial		Native, warm season perennial grass. Includes material and shipping only.	Acre	\$205.56	1	\$205.56

Scenario: #6 - 332-Introduced-High Value Cropland

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of mainly introduced species. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Introduced grasses and legumes will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Introduced species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$1,049.27 Scenario Cost/Unit: \$1,049.27

Cost Details (by category	·):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.01	1	\$20.01
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.75	1	\$5.75
Foregone Income						
FI, Vegetables	2033	Vegetables is Primary Crop	Acre	\$961.50	1	\$961.50
Materials						
Herbicide, Glyphosate		A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.83	1	\$15.83
Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$46.18	1	\$46.18

Scenario: #7 - 332-Wildlife/Pollinator-High Value Cropland

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of mainly pollinator friendly species. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Plant species will be established in strips in the field to meet the water erosion resource needs AND provide the targeted wildlife/pollinators the necessary food and/or cover AND any other producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species selected shall meet the wildlife/pollinator habitat requirements of the state and be adapted to site; not function as a host for diseases of a field crop and; have physical characteristics necessary to control sheet and rill erosion to tolerable levels on the cropped area of the field.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$1,208.65 Scenario Cost/Unit: \$1,208.65

Cost Details (by category	·):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.75	1	\$5.75
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.01	1	\$20.01
Foregone Income						
FI, Vegetables	2033	Vegetables is Primary Crop	Acre	\$961.50	1	\$961.50
Materials						
Herbicide, Glyphosate		A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.83	1	\$15.83
Three plus Species Mix, Warm Season, Native Perennial		Native, warm season perennial grass. Includes material and shipping only.	Acre	\$205.56	1	\$205.56

Scenario: #8 - 332-Organic Seed-High Value Cropland

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all cropland. Practice includes seedbed prep and planting of certified organic seed. The area of the field border is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Certified organic grass and legume seed will be planted in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of Acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$1,212.08 Scenario Cost/Unit: \$1,212.08

Cost Details (by category	·):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.01	1	\$20.01
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.75	1	\$5.75
Foregone Income						
FI, Organic, Vegetables	2252	Vegetables is Primary Crop	Acre	\$1,105.72	1	\$1,105.72
Materials						
Certified Organic, Three Species Mix, Cool Season, Perennial Grasses and Legumes	2340	Certified organic cool season perennial grass and legume mix. Includes material and shipping only.	Acre	\$64.77	1	\$64.77
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.83	1	\$15.83